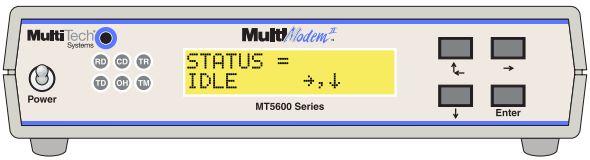
MultiModem II™



Model MT5600BA
Model MT5600BL

Data/Fax Modem

Quick Start Guide

MultiTech® Systems

MultiModemII Quick Start Guide
Models MT5600BA and MT5600BL
P/N 82086201 Revision B

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Record of Revisions

Revision	*Date*	*Description*
B	6/1/01	Updated phone numbers, added patent list and system CD, deleted BBS and fax-back references, and revised Chapter 2.

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Patents

This device is covered by one or more of the following patents: 6,031,867; 6,012,113; 6,009,082; 5,905,794; 5,864,560; 5,815,567; 5,815,503; 5,812,534; 5,809,068; 5,790,532; 5,764,628; 5,764,627; 5,754,589; D394,250; 5,724,356; 5,673,268; 5,673,257; 5,644,594; 5,628,030; 5,619,508; 5,617,423; 5,600,649; 5,592,586; 5,577,041; 5,574,725; D374,222; 5,559,793; 5,546,448; 5,546,395; 5,535,204; 5,500,859; 5,471,470; 5,463,616; 5,453,986; 5,452,289; 5,450,425; D361,764; D355,658; D355,653; D353,598; D353,144; 5,355,365; 5,309,562; 5,301,274. Other patents pending.

Notice

Though these modems are capable of 56K bps download performance, line impairments, public telephone infrastructure and other external technological factors currently prevent maximum 56K bps connections.

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Introduction

Congratulations on your purchase of the MultiModemII modem. You have acquired one of the finest data/fax dialup and leased line modems available today from one of the world's oldest modem manufacturers: Multitech Systems, Inc.

This *Quick Start Guide* will help you install and set up your modem. A full *User Guide* containing detailed configuration information, a command reference, a troubleshooting chapter, and an index, can be found on one of the disks in the modem package. The *User Guide*, which is in Adobe Acrobat 4.0 format, can be viewed on your monitor or printed out for easy reference.

What Is in Your Modem Package?

Your modem package has several components. Make sure you have them all before trying to operate your modem. Your package should include:

- ✔ An MT5600BA or MT5600BL modem
- ✔ An external transformer module
- ✔ One (MT5600BA) or more (MT5600BL) modular telephone cables
- ✔ This *Quick Start Guide*
- ✔ A CD containing data communications and other programs
- ✔ An installation CD containing modem drivers and a *User Guide*

If any of these items are missing, please contact Multi-Tech Systems or your dealer/distributor (see Appendix D of the *User Guide* for information about contacting Multi-Tech via telephone, fax, or the Internet).

What You Will Need

In addition to the contents of the MultiModemII package, you will need the following items:

- ✔ A computer with an unused serial port
- ✔ A shielded RS-232 serial cable with a male DB-25 connector on one end and a connector to match your computer's serial port on the other end
- ✔ A nearby AC power outlet
- ✔ A nearby telephone line
- ✔ A nearby leased line jack or terminals (optional)

Safety Warnings

- Use this product only with UL- and CUL-listed computers.
- To reduce the risk of fire, use only 26 AWG or larger telephone wiring.
- Never install telephone wiring during a lightning storm.
- Never install a telephone jack in a wet location unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone (other than a cordless type) during an electrical storm; there is a risk of electrical shock from lightning.
- Do not use a telephone in the vicinity of a gas leak.

Step 1: Connect the Modem to Your System

Turn off your computer. Placing the modem in a convenient location, connect it to your computer's serial port, to the telephone line, to your leased line, to AC power, and, optionally, to your telephone.

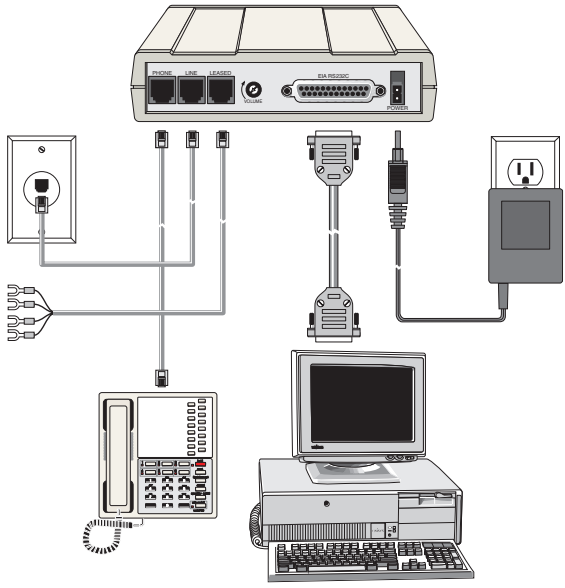

Figure 1. MT5600BL connections.

RS232 Connection

Plug one end of the serial cable into the RS232 connector on the modem, and the other end into a serial port connector on your computer, such as COM1 or COM2.

Dialup Connection

Plug one end of the modular phone cable into the modem's LINE jack, and the other end into a public switched telephone network (PSTN) wall jack.

Note: The LINE jack is not interchangeable with the PHONE jack. Do not plug the phone into the LINE jack or the line cable into the PHONE jack.

Note: Regulatory agencies may impose certain restrictions on equipment connected to public telephone systems. For more information, see Appendix A of the *User Guide*.

Two-Wire Leased Line Connection

MT5600BA Plug one end of a two-wire phone cable into the modem's LINE jack, and connect the other end to a leased line wall jack or terminals.

MT5600BL Plug one end of a two-wire phone cable into the modem's LEASED jack, and connect the other end to a leased line wall jack or terminals.

Four-Wire Leased Line Connection

On an MT5600BL only, plug one end of a four-wire phone cable into the modem's LEASED jack, and connect the other end to a four-wire leased line wall jack or terminals. For dial back-up operation, plug one end of the modular phone cable into the modem's LINE jack, and the other end into a PSTN wall jack.

Phone Connection

For voice-only calls, plug a telephone into the modem's PHONE jack (optional).

Power Connection

Plug the transformer module into an AC power outlet or power strip. Plug the transformer module's cable into the POWER jack on the modem.

Note: Use only the transformer module supplied with the modem. Use of any other module voids the warranty and can damage the modem.

Power-On Test

Test the modem by turning it on (a power switch is located on the front panel). When you apply power, the modem performs a diagnostic self-test, indicated by the TM indicator lighting for a few seconds, after which the LCD should light. If this does not happen, check that the power switch is on, the transformer module supply is solidly connected, and the AC outlet is live. If these measures do not work, see Chapter 8 of the *User Guide*, "Solving Problems."

Step 2: Install the Modem Driver

If you use Windows 95, Windows 98, Windows Me, Windows NT 4.0, or Windows 2000, you must install the modem driver. (If you use Windows 3.1 or another operating system, skip this step and go to Step 3.)

1. Make sure your modem is connected properly, and then turn on your computer. Windows should detect your new modem and open the **Install New Modem** wizard.

   Note: If Windows cannot find a modem, your modem may be turned off, it may be plugged into the wrong connector on your computer, or the serial cable may be faulty. See "None of the LEDs Light When the Modem Is Turned On" and "The Modem Does Not Respond to Commands" in Chapter 5 of the *User Guide*, "Solving Problems."

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2. In the **Install New Modem** wizard, select **Don't detect my modem; I will select it from a list**, and then click **Next**. A dialog box with a list of manufacturers and a list of modem models appears.
3. Insert the installation CD into your CD-ROM drive, and then click **Have Disk**.
4. In the **Install from Disk** dialog box, select the drive the CD is in, and then click **OK**.
5. A list of modems appears. Select your modem from the list, and then click **Next**.
6. Select the port the modem is connected to, and then click **Next**.
7. Windows installs and configures the modem.
8. Click **Finish** to exit.

Step 3: Install and Configure Your Software

You may use either the communication program included with your modem or a third-party program. Communication programs designed for Windows 95/98/Me and Windows NT/2000 normally do not need to be manually configured, since they use the Plug and Play configuration of the Windows modem driver. Communication programs designed for DOS and other operating systems, however, may need to be manually configured to work with your modem. Though each communication program is different, the following procedure should work with most of them.

1. Install and run your communication program.
2. Find the dialog box or menu that lets you select your modem. (In Windows Terminal select **Settings** | **Modem Commands**; in HyperTerminal select **File** | **Properties** | **Phone Number**; and in PhoneTools select **Configure** | **General Configuration** | **Communication** | **Change Modem**.

3. Choose your modem from the software's modem list. If it isn't listed, choose a generic modem and modify the settings as necessary.

4. Change the modem initialization string, if necessary. The factory default configuration works well for most purposes. To load the factory default configuration, use **AT&F**. To load a custom configuration that was saved using the *&W* command, use **ATZ**. Note that the ***Z*** command must be in a command string by itself. For a Macintosh, the initialization string should include the ***&D0*** command. If you do not want the modem to always answer the phone, add **S0=0** to the string. To use Caller ID with the modem, add **S0=2** to the string (Caller ID information is sent between the first and second rings, so the phone must ring at least twice befor the modem picks up the line). Depending on the software, you might have to end the string with a carriage return character (**^M**).

Note: To change the modem's default configuration, type new commands in the communication program's terminal window, adding the *&W* command to store them in the modem's nonvolatile memory. For instance, to create a default configuration for a Macintosh computer that turns off autoanswer, type **AT&F&D0S0=0&W**. The new configuration loads automatically whenever the modem is turned on or receives the **ATZ** command.

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5. Select the port the modem is connected to (normally COM1 or COM2).

6. Select your serial port speed. This can be labeled "maximum speed," "DTE bps," or "baud rate." Ideally, if you use data compression, you should set your serial port baud rate to four times the modem's maximum transmission speed or faster; however, few files can be compressed enough to require speeds that high, and not all serial ports can handle speeds that high.

7. If the software has an autobaud selection, make sure it is disabled. Autobaud applies only to older modems, and can cause problems if enabled.
8. If the software allows you to edit the no-connect messages (*NO CARRIER, BUSY, NO ANSWER, NO DIALTONE*), make sure there is no space between *DIAL* and *TONE* in *NO DIALTONE*.
9. Refer to the software manual or online help for other configuration choices; in most cases you can accept the default values.

How to Get a Copy of the *User Guide*

The full *MultiModem II User Guide* can be found on a compact disc included with your modem. The *User Guide* describes the modem's features, connections, front panel operation, and AT command set in detail. It also describes how to upgrade the modem's firmware and resolve common problems. If you have any problems getting your modem to work, please refer to the *User Guide* before calling Technical Support (800-972-2439 or 763-785-3500).

The *User Guide* is in Adobe Acrobat format, and requires Adobe Acrobat Reader 4.0 or later. The Adobe Acrobat Reader program can be found on the installation CD included with your modem. The latest version of Adobe Acrobat Reader can be downloaded from the Adobe Web site at *http://www.adobe.com/products/acrobat/readstep2.html*.